FINAL

Quendall Terminals Project Team Meeting EPA Region 10, Seattle, WA July 30, 2015 – 1 pm

ATTENDEES

EPA Region 10

Claire Hong EPA Region 10, Remedial Project Manager

Cami Grandinetti EPA Region 10
Kyra Lynch EPA Region 10
Rene Fuentes EPA Region 10
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Respondents

Robert Cugini Altino Properties

Lynn Manolopoulos Davis Wright Tremaine LLP
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Tim Flynn Aspect Consulting
Jeremy Porter Aspect Consulting
Barry Kellems Integral Consulting

ITEMS DISCUSSED

AOC Scope of Work

Recap Remedy Discussion from November 2014 Meeting/Summary of Common Understandings

Respondents provided a very brief recap of the discussion during the November 2014 meeting and the follow-up "Common Understandings" from EPA summarizing the potential strategies for Quendall remediation (i.e., interim remedy, final remedy, phased implementation of a final remedy) in light of site development. They noted this led to the Respondents' desire for additional data (see next item).

Review Objectives of the Remedy Definition Study

Respondents summarized the primary objective of the proposed scope of work (SOW) for the Remedy Definition Study, which is to better understand the cost of the remedy. They are proposing to use TarGOST to gather higher resolution DNAPL data and reduce the uncertainty of the DNAPL areas defined by the "polygons" used in the Feasibility Study (FS).

Respondents also noted that they are asking again that EPA support collection of more groundwater data and that the existing groundwater model incorporate the new data and be calibrated to match the current site conditions (to fill gaps in the sampling coverage). Respondents stated that the reason for needing additional groundwater data is because the Remedial Action Objective (RAO) for DNAPL is: "Treat or remove DNAPL in subsurface soils and groundwater to prevent contamination of groundwater above COC MCLs to the extent practicable" and that more groundwater data is needed to understand where the DNAPL areas are that have the greatest impact to groundwater. Respondents also noted the National Remedy Review Board commented that more might be needed to actively address groundwater; therefore the Respondents want a more robust data set to calibrate the existing groundwater model to reflect the actual plume size (versus the one depicted by the FS model).

A very extensive discussion followed on how all of the proposed new data would be interpreted. The

Respondents specifically requested clarity on what criteria will be used to decide what gets treated or not. EPA responded that they cannot answer that question now and are uncomfortable changing the conceptual site model (CSM) at this point. They stated that the Respondents will not get a commitment from EPA on how the data will be interpreted upfront. EPA strongly suggested proceeding in stepwise fashion. Respondents referenced the Wyckoff project for comparison. EPA stressed that Wyckoff is different from Quendall in that for that site, EPA is not seeking finality, but deliberately using a stepwise approach. EPA also suggested that additional characterization at Quendall may not reduce the treatment volume significantly and that the way in which boundaries may be defined for source treatment will only be known after the data are interpreted and fully evaluated. EPA emphasized there are many steps to getting to the level of decisionmaking that the Respondents are seeking.

There was discussion on the timing of evaluating the data and refining the cost estimates in terms of the larger project schedule. The Respondents stated that the refined cost estimates would be desirable (but not necessary) before the Proposed Plan is issued, but stressed that it is critical before the Record of Decision is issued, as the ROD "will decide whether the site can be developed or not". The Respondents also noted that negotiations with other potentially responsible parties (PRPs) will be easier if they can bring a developer with "real money" to the table.

Part II - EPA Revised Comments on the Draft Final FS

Respondents noted that several steps would be involved in finalizing the FS (i.e., resolution of EPA's July 27, 2015 comments; Respondents' submittal of pre-final Sections 1 through 7; EPA's review of Sections 1 through 7; Respondents' submittal of final Sections 1 through 7 and pre-final Section 8; EPA's review of pre-final Section 7; Respondents' editing, production, and submission of the final FS.

There was a lengthy discussion on the timeframe for accomplishing the work to finalize the FS. EPA clarified that the revisions will be based on EPA's comments submitted in October 2014 plus the July 2015 clarifications. EPA also suggested setting up regular check-ins (e.g., weekly calls) for reviewing and resolving FS issues. Respondents suggested that after clarity on the comments, they would aim to deliver Sections 1 through 7 in 60 days; they noted they would need another 60 days after receiving EPA comments on Sections 1 through 7 to finalize Section 8 and produce the final FS. Respondents suggested creating a schedule with milestones reflected. Additional discussion led to decision to begin with a 60 day timeframe from today, for Respondents to submit Sections 1 through 7. EPA will write a letter indicating this agreement with some flexibility (see Action Items below).

Regarding the July 27, 2015 "Issues Table", EPA clarified that 'Comment Noted' meant that EPA agreed with the Respondents' November 2014 Response.

A few specific items from the July 27, 2015 "Issues Table" were also discussed:

- PRP Response No. 3 Respondents concerned with language: "... a final remedy must address all PTW unless technically impracticable", noting it implies referral to a technical impracticability waiver. They cited the RAO to treat or remove DNAPL as source of contamination to groundwater being the driver for source removal. EPA responded that the FS already assumes the areas of treatment, so this statement does not affect the discussion of long-term permanence and effectiveness in the FS.
- PRP Response No. 17 Respondents noted they will default to an amended cap when either an amended cap or a reactive core mat (RCM) caps is equally indicated. They also requested the flexibility to choose between an amended cap versus an RCM cap based on the thickness and depth of DNAPL, and the need for dredging to install an amended cap (i.e., chose an RCM cap if dredging to install the cap would preclude the need for a cap). EPA agreed to allow Respondents to proceed along these lines.

• PRP Response No. 44b – Respondents requested "de minimis" be changed to another term. EPA agreed to allow a change to "minimal" or "extremely limited" or something similar.

ADDITIONAL AGREEMENTS

- Respondents may propose collection of additional groundwater data for use in characterizing the current plumes and recalibrating the groundwater model in the revised SOW.
- No modeling revisions will be included in the FS Report.
- Modeling data will be depicted together with empirical data, which will be used to calibrate the
 model. No predictive analysis will be done with the model (i.e., no alternative scenarios will be
 re-run). The model will be used for geo-spatial depiction only, to aid in the understanding of the
 current dimensions of the plumes.
- Respondents will be given 60 days (from June 30, 2015) to submit revised Sections 1 through 7 of the FS Report (September 28, 2015). Based on subsequent discussions/meetings, this time frame may be extended (i.e., there is flexibility with the due date if there are issues with clarification).
- Finalizing the FS Report will proceed independent of the Remedy Definition Study.
- The Proposed Plan and ROD will be prepared after completion of the Remedy Definition Study.

ACTION ITEMS

- Respondents to send revised scope of work for Remedy Definition Study.
- EPA to send a letter (email only) identifying a 60-day time frame (from this meeting date) for the Respondents to submit revisions for Sections 1 through 7 of the FS Report.
- EPA and Respondents to identify and communicate acceptable meeting dates for week of August 24, 2015.